

February 13, 1998

Dear Colleague:

The Federal Geographic Data Committee (FGDC) is requesting your support in reviewing the National Academy of Public Administration (NAPA) Report "Geographic Information for the 21<sup>st</sup> Century" and in identifying and moving forward on opportunities presented in the report for furthering the National Spatial Data Infrastructure.

A panel from the NAPA has completed its report of U.S. geographic information resources and the nation's need for geographic information. The report entitled "Geographic Information for the 21<sup>st</sup> Century" was released in mid-January and is available in hard copy from NAPA with summaries of the report also available from the NAPA Website at [www.napawash.org](http://www.napawash.org).

The study was conducted at the request of the Bureau of Land Management, the U.S. Geological Survey, the Forest Service, and the National Ocean Service. While the study was requested by the four agencies listed, as the study proceeded it became evident to the agencies and the panel that trends and activities in the larger geospatial arena should be examined. Thus, an important focus of a large portion of the study became the (NSDI), the (FGDC) and the involvement of all sectors of the geospatial data community.

With the understanding that many NSDI, FGDC and related issues were addressed, the NAPA study was identified as an agenda topic for the NSDI Partnership meeting held on January 13, 1998 with Secretary of the Interior Babbitt and the members of the FGDC Steering Committee. This meeting was also attended by representatives of 24 NSDI Cooperating State Councils, the National Association of Counties, the National States Geographic Information Council, the National League of Cities and the FGDC Coordination Group. In addition, representatives of the University Consortium for Geographic Information Sciences and several other agencies and organizations attended the meeting. The study had just been received by the meeting participants, but the general feeling of the group was that it offered many recommendations and opportunities for furthering the implementation of the NSDI. It also was the feeling of the group that the community should give careful review and consideration to the report and then reach consensus on those recommendations that they could move forward together on. Secretary Babbitt provided guidance to the group that it should look for opportunities to work on those areas of agreement and that it should set aside those recommendations dealing with Federal agency reorganization issues.

After the NSDI Partnership meeting, representatives of many of the organizations met to define follow up actions. For the NAPA study the following was agreed to as an approach for review and analysis:

Each agency/council/organization review and consider the report and recommendations and provide comments to the FGDC Secretariat by April 3, 1998,

Convene an Intersector Team to assess the comments collectively, and provide an analysis and draft position by May 1, 1998

Propose an implementation approach for presentation at an NSDI Partnership meeting in mid-June 1998.

The report is available on hard copy from NAPA with summaries of the report also available from the NAPA Website at [www.napawash.org](http://www.napawash.org). Please review the report and lend your support to identifying and moving forward on the opportunities the report presents to us for furthering the NSDI. In order to structure the comment and analysis process, we suggest that any comments be provided in the format in Enclosure 1. Additionally, as discussed above, this review is to address those recommendations relevant to the NSDI and FGDC. Recommendations specific to agency organizational issues are not to be part of this exercise. Comments about those recommendations should be addressed to the affected agency.

Comments should be sent by April 3, 1998 to:

FGDC Secretariat  
590 National Center  
Reston, VA 20192

An electronic version of the document may be downloaded from the FGDC Website at [www.FGDC.gov](http://www.FGDC.gov). If you wish to comment via e-mail please send your response to [gdc@usgs.gov](mailto:gdc@usgs.gov).

We appreciate your support.

Sincerely,

John J. Moeller,  
Staff Director, FGDC

## ENCLOSURE 1

### Review of the Recommendations of the National Academy of Public Administration Report “Geographic Information for the 21st Century: Building a Strategy for the Nation”

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*The National Academy of Public Administration has conducted a comprehensive analysis of the public management issues associated with the trends and developments in geographic information. The following consists of the full list of Recommendations from the Report numbered from 1-51. The Recommendations are not numbered in the report and numbering is for the purpose of common referencing for review and discussion of the Report.*

*This Review and comment process is being facilitated by the Federal Geographic Data Committee with the intent of soliciting a wide variety of comments and input on the Report's Recommendations so that the geospatial data community can collectively take advantage of opportunities it offers for furthering the implementation of the National Spatial Data Infrastructure. Please refer to the memorandum that transmitted this enclosure for background on the review approach.*

#### Use of the Review and Comment Format

The complete list of Recommendations from the NAPA Report and these guidelines are for the purpose of organizing the comments and suggestions for implementation. The recommendations are presented in numbered order from the Report. For each recommendation we are soliciting comments on Implementation Category and Priority, Action Level, and your general comments. This will enable commentors to offer their views on implementation categories, priority and action level and for these particular items to be coded alpha-numerically. Views expressed under the Comments section will be in narrative form and will be analyzed by a different method.

#### Implementation

##### Category:

1. Implementation possible within current agency/organization capability
2. Requires agency/organization policy direction or shifting of priorities
3. Implementation possible with additional agency/organization resources
4. Requires cross/inter sector action
5. Need new authority

Priority:

- H. Top priority - should be given high level of attention for immediate action
- M. Medium priority
- L. Low priority - will get to it when possible
- N. Not a priority - not important to do

Action Level

- L. Local level of government is where action or lead for action should occur
- S. State government is where action or lead for action should occur
- F. Federal government is where action or lead for action should occur
- T. Tribal governments is where action or lead for action should occur
- P. Private sector is where action or lead for action should occur
- A. Academia is where action or lead for action should occur

Examples:

9). Encourage active participation in FGDC by all agencies having major GI-related programs, including NASA and DoD.

<u>Implementation</u>	<u>Action Level</u>
2, H	F

Comments: ( Specific comments of importance to the organization/person who is responding.)

20). Make use of on-going initiatives, such as land-use planning for public lands and ecosystem management, as drivers to strengthen state/local support for common standards.

<u>Implementation</u>	<u>Action Level</u>
2 H	L,S,F

Comments: ( Specific comments of importance to the organization/person who is responding)

Note:

As discussed in the transmittal memorandum, this review is to address those recommendations relevant to the NSDI and FGDC. Recommendations specific to agency organizational issues are not to be part of this exercise. Comments about those recommendations should be addressed to the affected agency. Agency organizational issues are addressed principally in Chapter 5 of the Report. (Recommendations 29-32).

Please send Comments to the Federal Geographic Data Committee, Secretariat by April 3, 1998

FGDC Secretariat  
590 National Center  
Reston, VA 20192

An electronic version of the document may be downloaded from the FGDC Website at [www.FGDC.gov](http://www.FGDC.gov). If you wish to comment via e-mail please send your response to [gdc@usgs.gov](mailto:gdc@usgs.gov).

## COMPLETE LIST OF RECOMMENDATIONS

### CHAPTER 3 - GEOGRAPHY-BASED PUBLIC PURPOSES AND GI ROLES

#### Recommendations

1). In order to help achieve the geography-related public purposes of the federal, state, local, and tribal governments, and public utilities outlined in this chapter, more effectively and efficiently, the federal government should help to ensure full and rapid implementation of the National Spatial Data Infrastructure (NSDI) in a cost-effective and cooperative manner.

Implementation

Action Level

Comments:

2). Interagency, and intergovernmental and private-sector GI user and producer groups, whose cooperation is essential to implementing NSDI, should continue to be convened to accelerated development, sharing, and maintaining of the NSDI framework data files. These groups should be used to negotiate additional data sharing and joint funding agreements. These groups and agreements should address the following key success factors of NSDI: (a) reliable geodetic referencing of data, (b) adequate content and format standards, (c) acquisition of commonly used and widely accepted data in compatible digital forms, and (d) the continuing capacity, expertise, skill, and engagement of public agencies necessary for them to ensure the quality of data from multiple sources.

Implementation

Action Level

Comments:

3). The potential for using geographic-referenced data from government and private transactions to maintain nationwide GI databases should be exploited, whenever appropriate and cost-effective, to ensure that the most current information is incorporated into the NSDI.

Implementation

Action Level

Comments:

4). Interagency and intergovernmental consortiums should be encouraged to become increasingly important providers of geospatial data to the NSDI, following national standards.

Implementation

Action Level

Comments:

5). The federal government should support long-term, interdisciplinary research by universities and others on GI technologies, earth sciences, and related topics, consistent with encouraging private sector initiatives. Priorities for such research should include, but not be limited to programs to develop: (1) practical generalization software to translate between scales; (2) techniques for utilizing satellite imagery to enable rapid updating of GI data files and maximum analytical use of this new source of massive amounts of GI without overwhelming the system; (3) easy-to-use automated techniques for updating base data with current transaction data; and (4) software for merging and harmonizing geographic data files from diverse sources.

Implementation

Action Level

Comments:

## **CHAPTER 4 - PROVIDING NATIONAL LEADERSHIP AND COORDINATION FOR THE NSDI**

### **Federal Geographic Data Committee (FGDC)**

#### **Recommendations for Immediate Action**

6). In order to aid in reconciling conflicts and to monitor agency implementation, designate the OMB program associate director for natural resources, energy, and science to be a full member of the FGDC.

Implementation

Action Level

Comments:



7). To bring a broader technology perspective to the FGDC, a senior staff member of the Office of Science and Technology Policy also should be a member of the committee.

Implementation

Action Level

Comments:

**Recommendations for Interim Action**

8). Further increase state, local, and tribal government participation in the FGDC and encourage stronger involvement by the private sector.

Implementation

Action Level

Comments:

9). Encourage active participation in FGDC by all agencies having major GI-related programs, including NASA and DoD.

Implementation

Action Level

Comments:

10). Rapidly grow the current FGDC clearinghouse to (1) identify as much geospatial data as possible, including state, local and private sector data, and (2) evolve toward user-friendly, on-line data access as technology permits.

Implementation

Action Level

Comments:

## **The Need for a New Public-Private Organization - The National Spatial Data Council (NSDC)**

### **Recommendations for a Long-term Solution**

11). Increase congressional, state legislature, county commission, city council, professional association, commercial, and public awareness of the NSDI's current and potential value, and current plans and strategies to develop it.

Implementation

Action Level

Comments:

12). Establish through legislation a national goal to create and maintain a robust NSDI.

Implementation

Action Level

Comments:

13). Create a private, nonprofit NSDC, modeled on the current FGDC and NSDI charters, with appropriate representation by all levels of government and the private sector.

Implementation

Action Level

Comments:

14). Retain FGDC, with ties to the NSDC, to coordinate federal GI under the NSDI.

Implementation

Action Level

Comments:

## **Using the Results Act (GPRA) As a Tool for Coordination**

### **Recommendation for Immediate Action**

15). Develop coordinated goals, strategies, performance measures and budgets for federal agency GI programs and activities. Explicitly establish selected strategic goals and performance measures, as required by the Results Act, to help move the NSDI toward further and faster realization.

Implementation

Action Level

Comments:

## **Standard-Setting Processes for U.S. Geographic Information**

### **Recommendations for Immediate Action**

16). Concentrate FGDC standard-setting activities on data content standards for the frame work layers.

Implementation

Action Level

Comments:

17). Increase staff support for FGDC secretariat functions and dedicate staff in each agency for standards development, implementation, compliance, and outreach, especially to federal field offices.

Implementation

Action Level

Comments:

18). Develop performance measures for agency development and compliance with FGDC standards.

Implementation

Action Level

Comments:

19). Improve structural coordination of framework activities and the FGDC standard-setting process.

Implementation

Action Level

Comments:

20). Make use of on-going initiatives, such as land-use planning for public lands and ecosystem management, as drivers to strengthen state/local support for common standards.

Implementation

Action Level

Comments:

21). Establish a FGDC presence on the IISP.

Implementation

Action Level

Comments:

22). Provide for stronger FGDC-NIMA coordination on international standards.

Implementation

Action Level

Comments:

**Recommendation for the Longer Term**

23). Standards that are national in scope should be coordinated by the NSDC. FGDC would represent the federal viewpoint in this council.

Implementation

Action Level

Comments:

**State and Local Government Coordination Initiatives****Recommendations**

24). Designate states as major nonfederal FGDC partners and encourage development of a strategy for all states to have greater commonality of GI capacity and infrastructure

Implementation

Action Level

Comments:



25). Re-examine the FGDC framework layers in the context of state and local GI needs as well as federal needs.

Implementation

Action Level

Comments:

### **Relationship of the NSDI to the National Information Infrastructure and the Information Technology Community**

#### **Recommendations for Immediate Action**

26). Get federal GI more actively integrated into the administration's NII initiatives and vice versa.

Implementation

Action Level

Comments:

27. Federal agencies need to incorporate GI and GIS and the NSDI concept into their overall information technology strategies and plans.

Implementation

Action Level

Comments:

## **CHAPTER 5 - POLICY BASES, STRUCTURE, AND ORGANIZATION TO MEET TODAY'S AND TOMORROW'S GI CHALLENGES AND OPPORTUNITIES**

### **Building the Policy Base Around a New National Commitment to the NSDI**

#### **Recommendation**

28). The administration should develop a new statute in cooperation with state and local governments and other organizations to create an NSDI, establish a National Spatial Data Council, and better define federal agency roles and responsibilities for NSDI so as to meet the participating organizations' programmatic needs.

Implementation

Action Level

Comments:

## **Base Geographic Functions and the Need for a New Geographic Data Service**

### **Recommendations for Immediate Action**

29). Forward to Congress legislation to transfer NGS to USGS and authorize the establishment of a GDS contingent upon submission of the reorganization plan prepared by a task force mandated by OMB.

This review is to address those recommendations relevant to the NSDI and FGDC. Recommendations specific to agency organizational issues are not to be part of this exercise. Comments about this recommendation should be addressed to the affected agency.

30). Consider creating a performance-based organization within DOI for federal surveying and land title records activities.

This review is to address those recommendations relevant to the NSDI and FGDC. Recommendations specific to agency organizational issues are not to be part of this exercise. Comments about this recommendation should be addressed to the affected agency.

### **Recommendations for the Longer Term**

31). Develop a reorganization plan, in cooperation with the NSDC, to implement the GDS and realign the federal field structure for base GI.

This review is to address those recommendations relevant to the NSDI and FGDC. Recommendations specific to agency organizational issues are not to be part of this exercise. Comments about this recommendation should be addressed to the affected agency.

32). Consider transferring responsibility for TIGER file maintenance, after the 2000 census, to GDS.

This review is to address those recommendations relevant to the NSDI and FGDC. Recommendations specific to agency organizational issues are not to be part of this exercise. Comments about this recommendation should be addressed to the affected agency.

## CHAPTER 6 - BALANCING THE ROLES AND FUNCTIONS OF THE GOVERNMENTAL AND PRIVATE SECTORS

### Assessing the Devolution Option

#### Recommendations

33). No specific federal GI functions should be devolved at this time.

Implementation

Action Level

Comments:

34). State and local governments should establish GI coordinating groups or focal points responsible for serving as the points of contact responsible for NSDI coordination and cooperation.

Implementation

Action Level

Comments:

## Evaluating Privatization Alternatives

### Recommendation

35). Government agencies should avoid engaging in value-added activities beyond the research and development phase when they can be provided by the private sector at or near government cost.

Implementation

Action Level

Comments:

## Contracting Out or Outsourcing Options

### Recommendations

36). USGS, or the GDS recommended in Chapter Five, should be tasked to coordinate federal acquisition of imagery for civil government purposes from aerial platforms and classified intelligence, civil domestic, foreign, and commercial satellites.

Implementation

Action Level

Comments:

37). The USGS-led Civil Applications Committee should take the lead in interaction with the intelligence community and with international and commercial providers on civil governmental needs and encourage the greater utilization of these data.

Implementation

Action Level

Comments:

38). Federal agencies should lead and encourage other levels of government to be involved in remote-sensing activities through example and partnering,

Implementation

Action Level

Comments:

39). Outsourcing decisions should be made on the basis of the respective roles, responsibilities, and competencies of the governmental and private sectors.

Implementation

Action Level

Comments:

40). Cost-effectiveness is one of several factors that needs to be considered; on the other hand, arbitrary percentage targets for contracting out should be avoided.

Implementation

Action Level

Comments:

## **Advancing Partnerships and Capacity Sharing**

### **Recommendations**

41). GI resource managers should increasingly emphasize multilateral partnerships - interagency, inter-governmental, and with the private sector - both to promote a robust NSDI and as a source of savings.

Implementation

Action Level

Comments:

42). USGS's unique authority to engage in innovative partnerships should be extended to other agencies.

Implementation

Action Level

Comments:



43). Multilateral partnering, including CRADA-type partnering with the private sector on agency operational activities, should be increased.

Implementation

Action Level

Comments:

## **Impact of Pricing Policies and Intellectual Property Rights**

### **Recommendations**

44). The federal government policy of promoting open access, especially for all data used in public policy decisionmaking, should be maintained and states and localities are urged to adopt similar policies.

Implementation

Action Level

Comments:

45). The federal government, possibly under the lead of the FGDC, should articulate a clear policy or draft legislation that allows the government to work cooperatively with the private sector to protect private-sector intellectual property rights for GI, particularly private and value-added GI data sets.

Implementation

Action Level

Comments:

## **CHAPTER 7 - OTHER ISSUES**

### **GI Technology Research and Development**

#### **Recommendations**

46). The technology development programs of civil agencies involved in GI should focus on civil government applications and basic science support. Federal government agencies should utilize, and not attempt to compete with, private-sector leadership in many areas of technology development applicable to GI.

Implementation

Action Level

Comments:

47). NIMA and NASA should ensure that FGDC members are made fully cognizant of technological developments applicable to civil government needs. To further civil government applications, the technology development programs of NIMA, the National Reconnaissance Office, and NASA should be coordinated and undertaken jointly, whenever possible, with civil agencies.

Implementation

Action Level

Comments:

48). The FGDC should act as the focal point for coordinating the high-priority GI technology needs of civil government at all levels and for mobilizing interagency, state, and local support for selective high-payoff technology developments with utility in multiple civil applications.

Implementation

Action Level

Comments:

## **Domestic-National Security Relations**

### **Recommendations**

49). NIMA should become much more actively engaged in the FGDC because of the increasing need to coordinate GI activities, including technological research, standards, security policy, procurement practices, and international activities.

Implementation

Action Level

Comments:

50). A policy-level committee that includes the secretary of the interior, the directors of NIMA and the National Reconnaissance Office, a representative of the director of central intelligence, and other appropriate representatives should be established to focus on policies needed to foster greater civil use of classified imagery.

Implementation

Action Level

Comments:

51). The CAC, supported by USGS's Advanced Systems Center, should become the technical and implementing arm of this committee.

Implementation

Action Level

Comments: